



Brown Marsh Phenomenon

Dieback of Large Expanses of Salt Marsh Grass in Coastal Louisiana

Background

Spartina alterniflora, also known as smooth cordgrass or oyster grass, dominates regularly flooded saline marshes along the Gulf of Mexico and the eastern United States coastline. This highly productive ecosystem provides critical habitat and nutrition for many avian, fish, and invertebrate species. In the spring of 2000, fishermen and scientists noticed that certain areas of coastal marsh in south Louisiana were turning brown. While patchy areas of dieback have been noticed in the past, the size of the current dieback area is unprecedented. The areas most affected are the salt marshes between the Mississippi and Atchafalaya Rivers.

Since the initial site visits in the early summer, the area of the marsh dieback has increased, and little recovery has been noted in affected areas. Inspections of roots and rhizomes indicate that this event is not simply a dieback of aboveground plant material, but can also result in death of belowground portions of the grass.

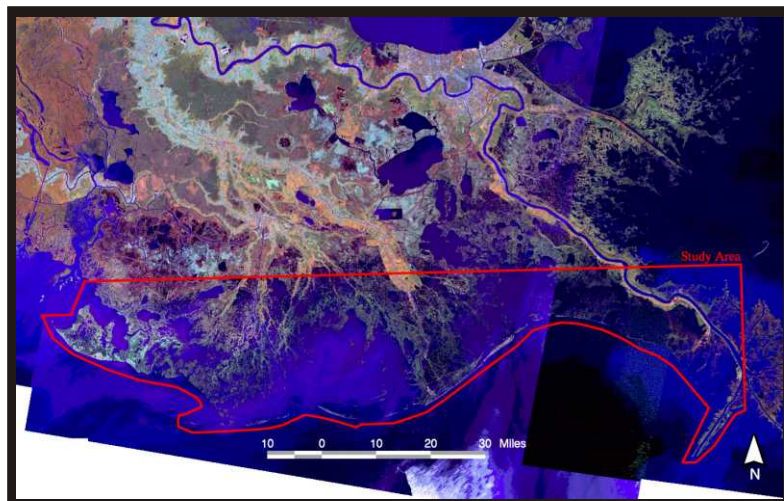


In the foreground is a dead salt marsh area. Green marshes in the background appear unaffected. Areas like this are becoming common in the Barataria and Terrebonne regions this summer.

Brown Marsh Action

Although we currently do not know the cause of the marsh dieback, scientists believe it is related to a combination of stressors, possibly including complications resulting from prolonged drought conditions, combined with other unknown biological or environmental stress factors.

A working group of resource managers and scientists has been established to address the problem of the marsh dieback. Field sites have been set up to test an array of biological, chemical, soil, and water parameters; satellite and aerial imagery is being acquired; and the Governor's Office is coordinating ongoing state and academic research efforts with federal efforts involving the CWPPRA Task Force and other coastal agencies and organizations.



Known extent of the marsh dieback.

Further Information

For the latest information, please go to the Breaux Act web site www.Lacoast.gov/brownmarsh or call the Louisiana Governor's Office of Coastal Activities at 225-342-3968.



Dead and dying marsh as seen from an airplane. Dark green areas in the back are healthy black mangroves.